

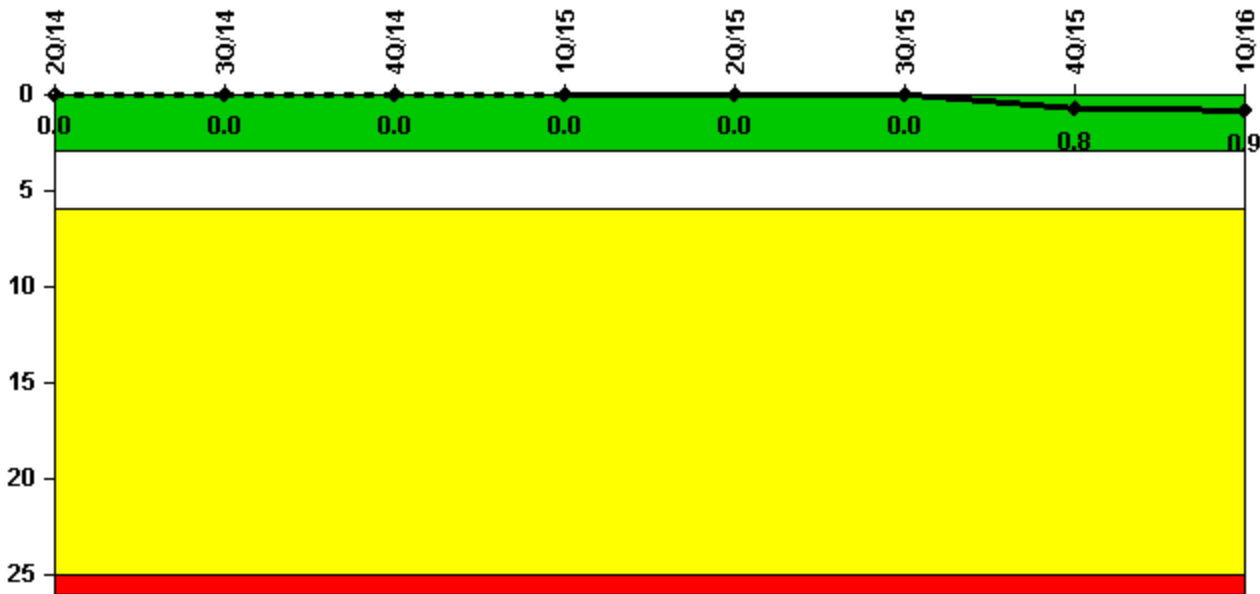
# Susquehanna 1

## 1Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



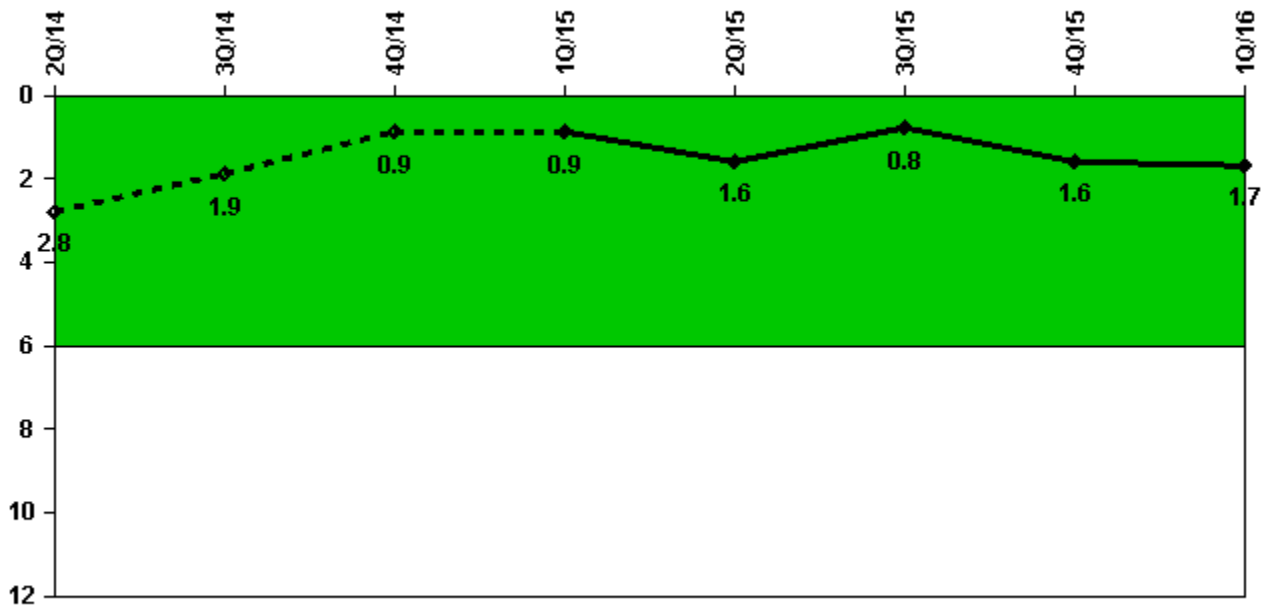
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Unplanned scrams	0	0	0	0	0	0	1.0	0
Critical hours	899.9	2208.0	2106.6	2159.0	2184.0	2208.0	2057.5	1711.4
Indicator value	0	0	0	0	0	0	0.8	0.9

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



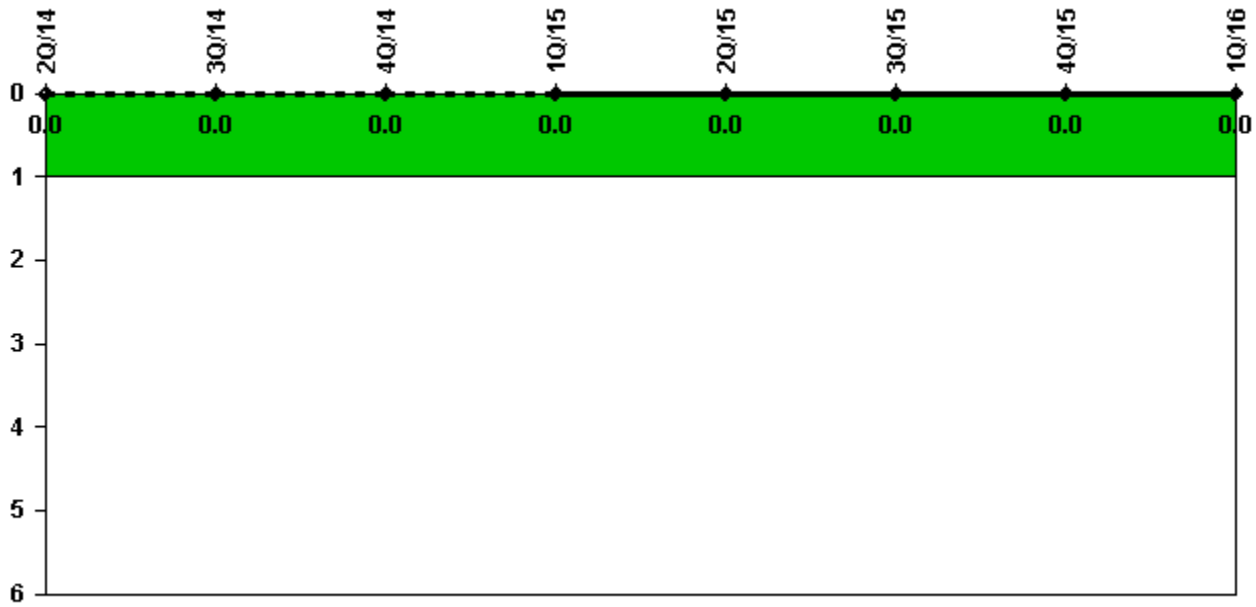
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Unplanned power changes	0	1.0	0	0	1.0	0	1.0	0
Critical hours	899.9	2208.0	2106.6	2159.0	2184.0	2208.0	2057.5	1711.4
<b>Indicator value</b>	<b>2.8</b>	<b>1.9</b>	<b>0.9</b>	<b>0.9</b>	<b>1.6</b>	<b>0.8</b>	<b>1.6</b>	<b>1.7</b>

Licensee Comments: none

### Unplanned Scrams with Complications



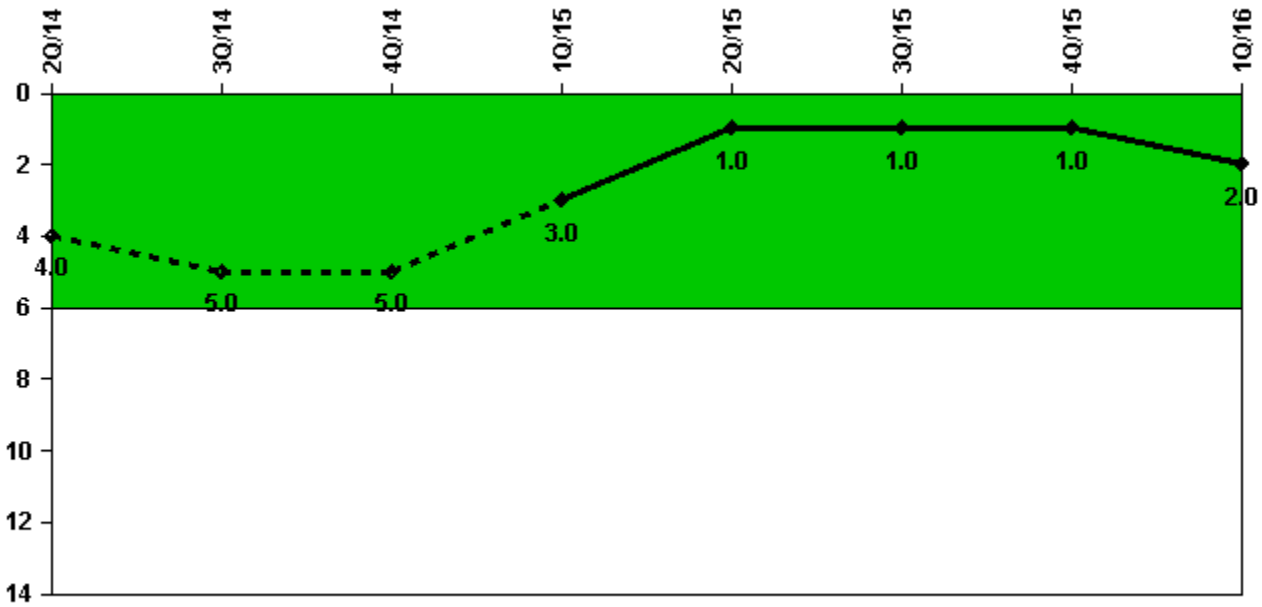
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Scrams with complications	0	0	0	0	0	0	0	0
<b>Indicator value</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Licensee Comments: none

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

#### Notes

Safety System Functional Failures (BWR)	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Safety System Functional Failures	2	1	0	0	0	1	0	1
Indicator value	4	5	5	3	1	1	1	2

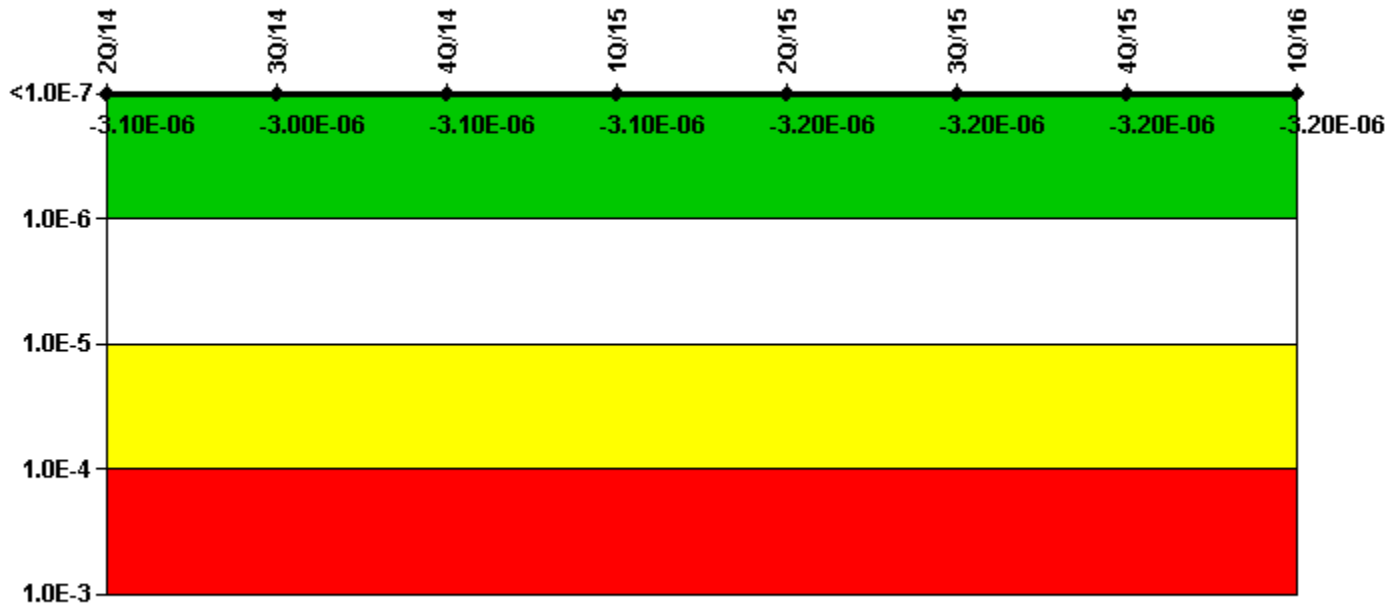
Licensee Comments:

1Q/16: LER 387(388)/2015-014

3Q/14: LER 50-387/2013-009-00: RPS EPA Logic Card Underfrequency Trip Setpoints Out of Calibration, submitted on July 18, 2014.

2Q/14: LER 387(388) 2014-002-00: Secondary Containment Door Found Ajar; Submitted on April 9, 2014  
 LER387(388) 2014-003-00: Loss of Secondary Containment During TS SR 3.6.4.1.5 Drawdown Testing; Submitted on May 1, 2014

### Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	1.27E-07	1.10E-07	-8.94E-09	-8.80E-09	-9.33E-09	-9.97E-09	-1.08E-08	-1.45E-08
URI ( $\Delta$ CDF)	-3.26E-06	-3.15E-06	-3.14E-06	-3.07E-06	-3.15E-06	-3.16E-06	-3.15E-06	-3.16E-06
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.10E-06	-3.00E-06	-3.10E-06	-3.10E-06	-3.20E-06	-3.20E-06	-3.20E-06	-3.20E-06

#### Licensee Comments:

1Q/16: Risk Cap Invoked.

4Q/15: Risk Cap Invoked.

3Q/15: Risk Cap Invoked.

2Q/15: Risk Cap Invoked.

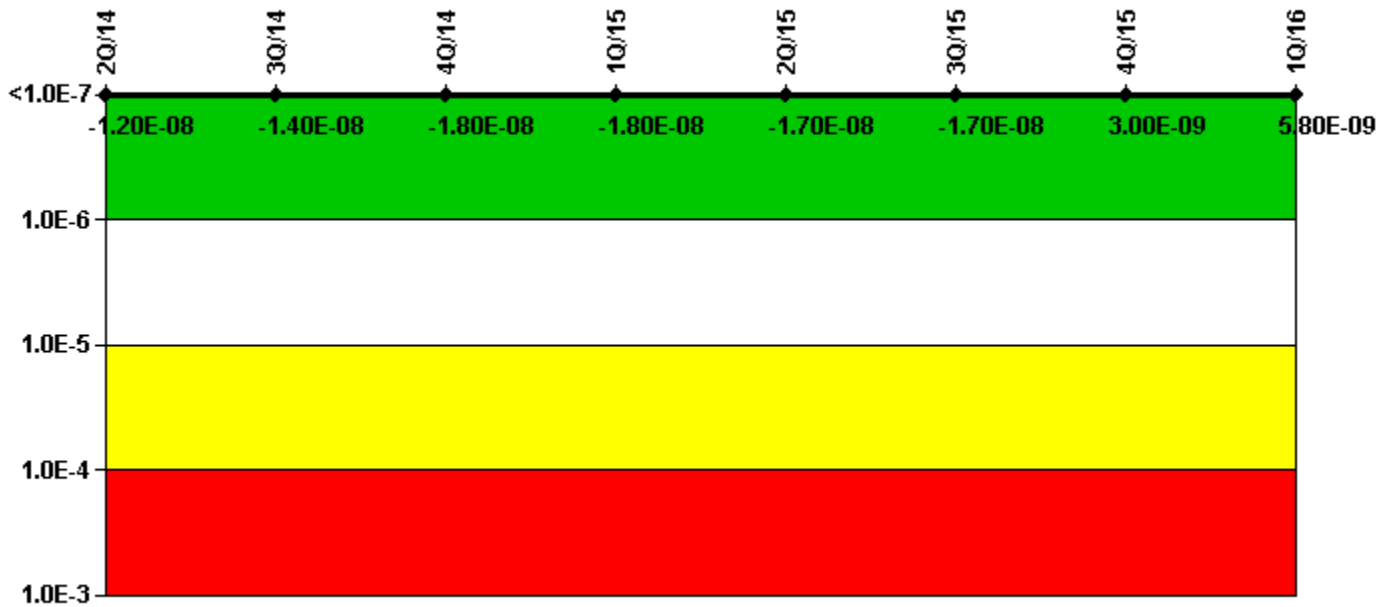
1Q/15: Risk Cap Invoked.

4Q/14: Risk Cap Invoked.

3Q/14: Risk Cap Invoked.

2Q/14: Risk Cap Invoked.

### Mitigating Systems Performance Index, High Pressure Injection System



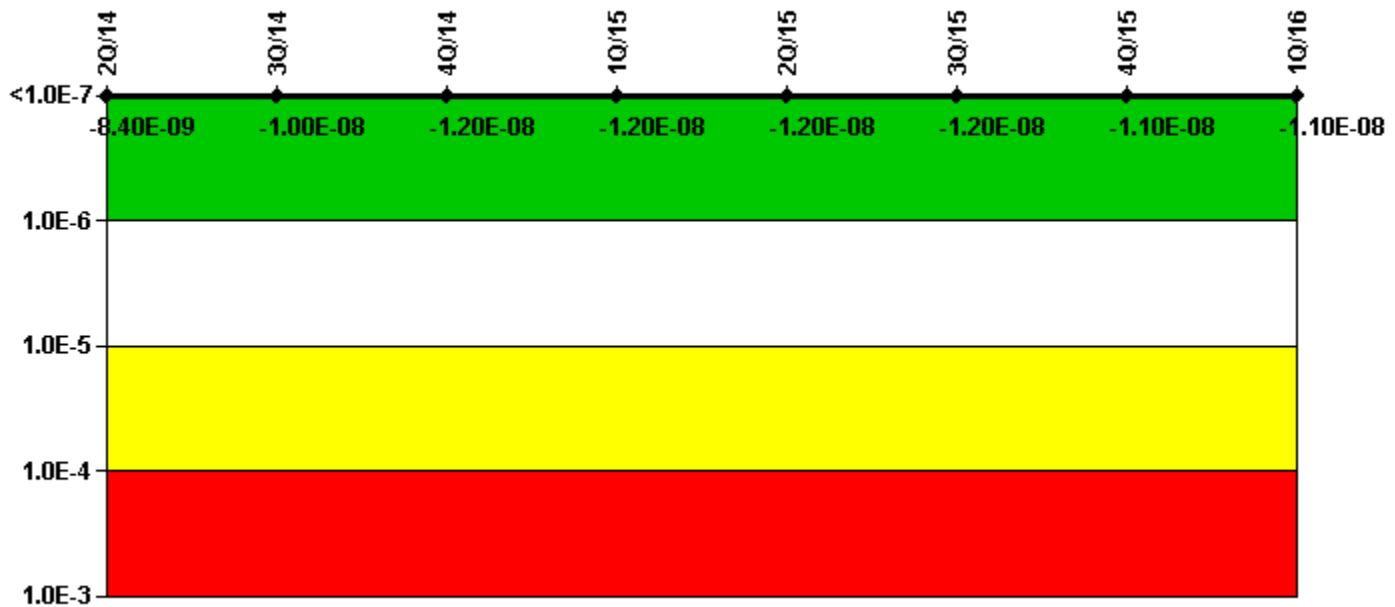
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	-3.00E-09	-4.56E-09	-9.32E-09	-9.32E-09	-8.31E-09	-8.33E-09	1.24E-08	1.52E-08
URI ( $\Delta$ CDF)	-8.96E-09	-8.96E-09	-8.51E-09	-8.44E-09	-8.44E-09	-8.44E-09	-9.33E-09	-9.40E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-08	-1.40E-08	-1.80E-08	-1.80E-08	-1.70E-08	-1.70E-08	3.00E-09	5.80E-09

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



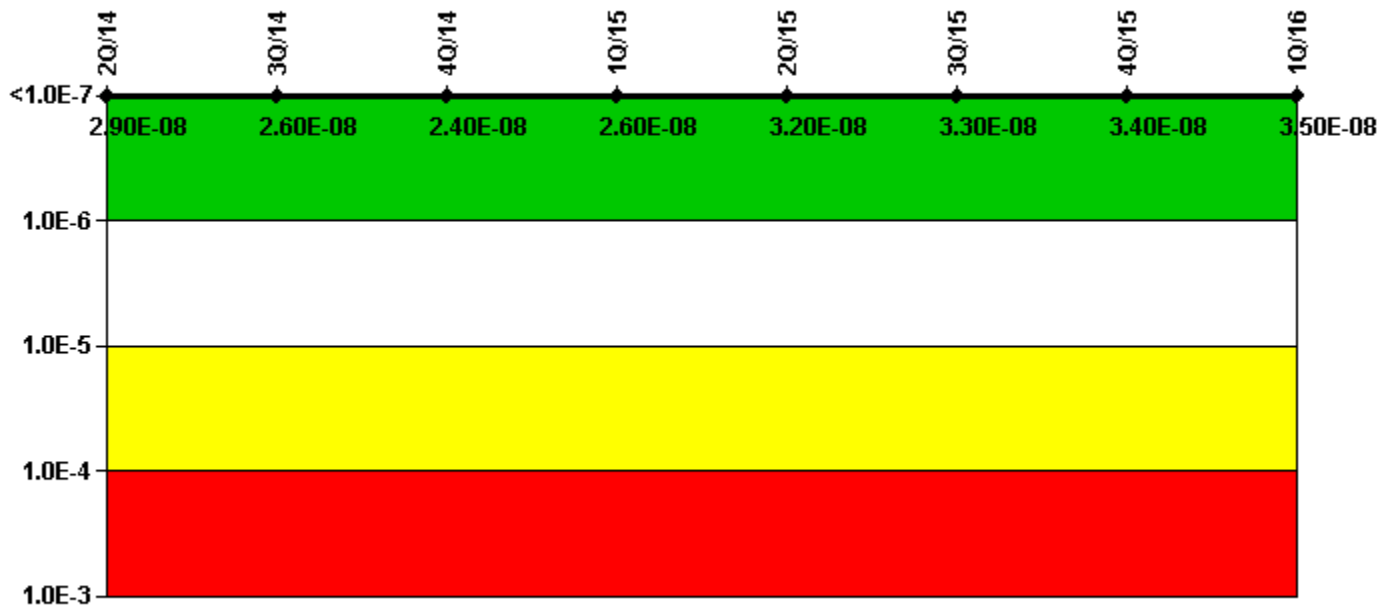
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	3.39E-10	-1.61E-09	-2.63E-09	-2.63E-09	-2.76E-09	-2.76E-09	-9.98E-10	-7.77E-10
URI ( $\Delta$ CDF)	-8.78E-09	-8.41E-09	-8.89E-09	-9.37E-09	-9.41E-09	-9.46E-09	-9.93E-09	-9.97E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-8.40E-09	-1.00E-08	-1.20E-08	-1.20E-08	-1.20E-08	-1.20E-08	-1.10E-08	-1.10E-08

Licensee Comments: none

### Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

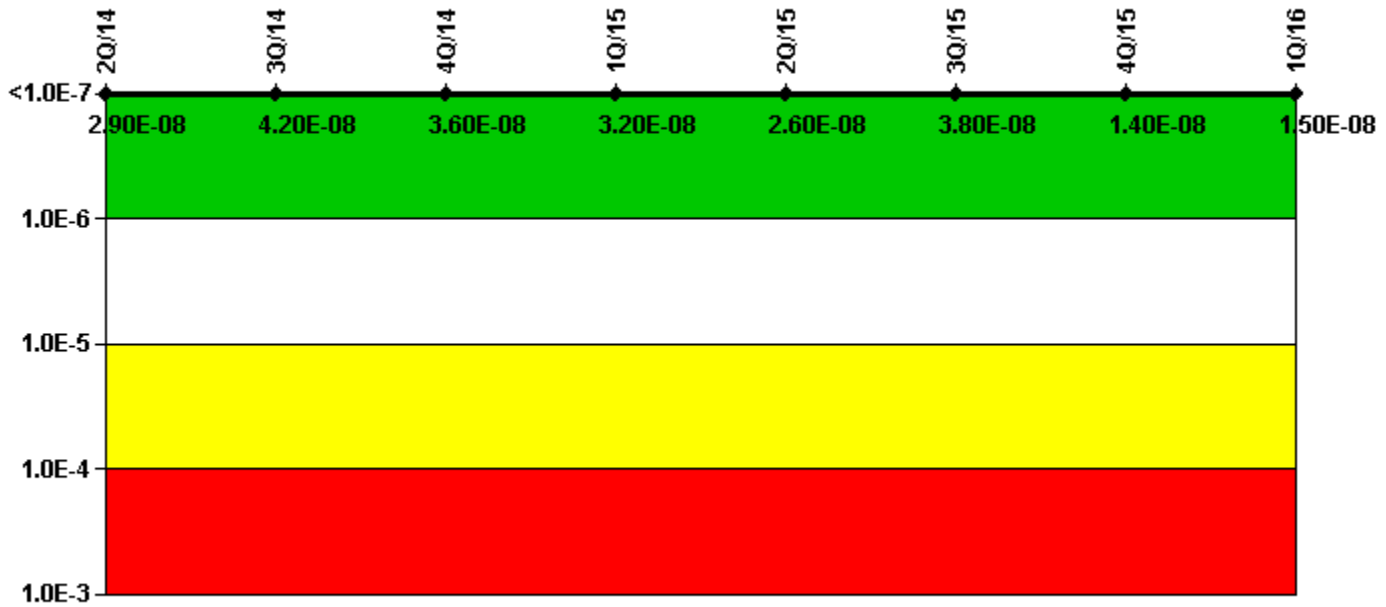
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	1.22E-08	3.85E-09	3.90E-09	3.90E-09	3.14E-09	3.14E-09	5.42E-09	9.15E-09
URI ( $\Delta$ CDF)	1.71E-08	2.22E-08	2.04E-08	2.25E-08	2.91E-08	2.95E-08	2.82E-08	2.62E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.90E-08	2.60E-08	2.40E-08	2.60E-08	3.20E-08	3.30E-08	3.40E-08	3.50E-08

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



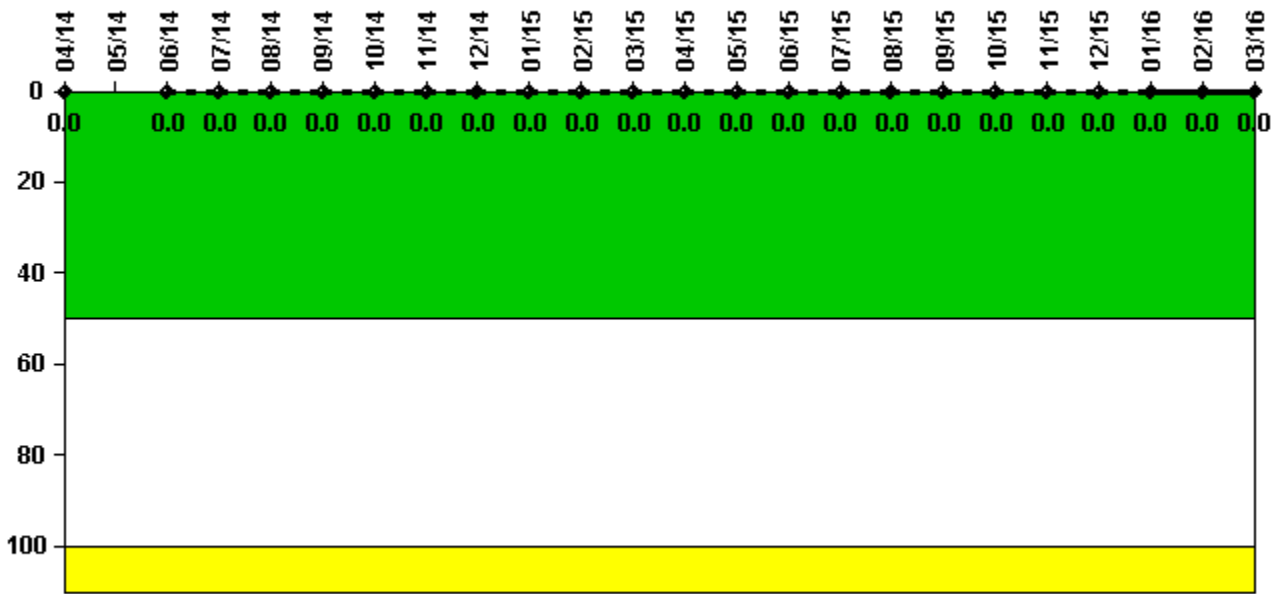
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	7.14E-08	8.58E-08	8.02E-08	7.68E-08	7.20E-08	8.47E-08	6.05E-08	6.21E-08
URI ( $\Delta$ CDF)	-4.28E-08	-4.37E-08	-4.46E-08	-4.51E-08	-4.57E-08	-4.65E-08	-4.67E-08	-4.74E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.90E-08	4.20E-08	3.60E-08	3.20E-08	2.60E-08	3.80E-08	1.40E-08	1.50E-08

Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

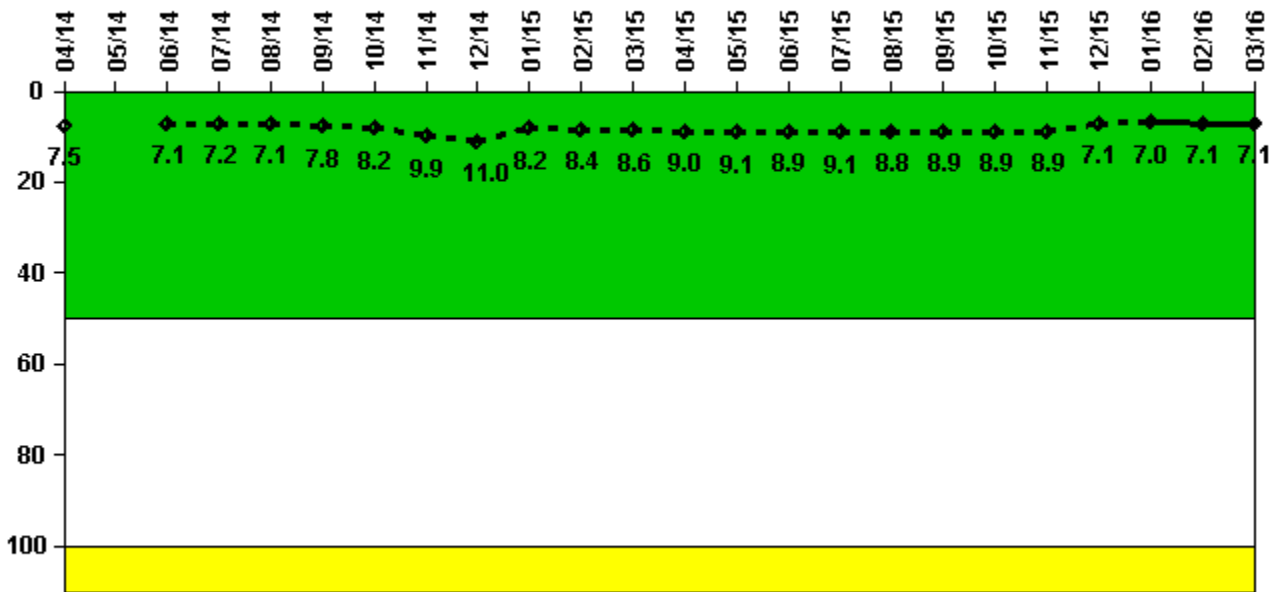
Reactor Coolant System Activity	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum activity	0.000010	N/A	0.000005	0.000006	0.000007	0.000007	0.000010	0.000009	0.000008	0.000008	0.000008	0.000008
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	N/A	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum activity	0.000009	0.000008	0.000010	0.000008	0.000008	0.000010	0.000009	0.000008	0.000008	0.000009	0.000008	0.000008
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

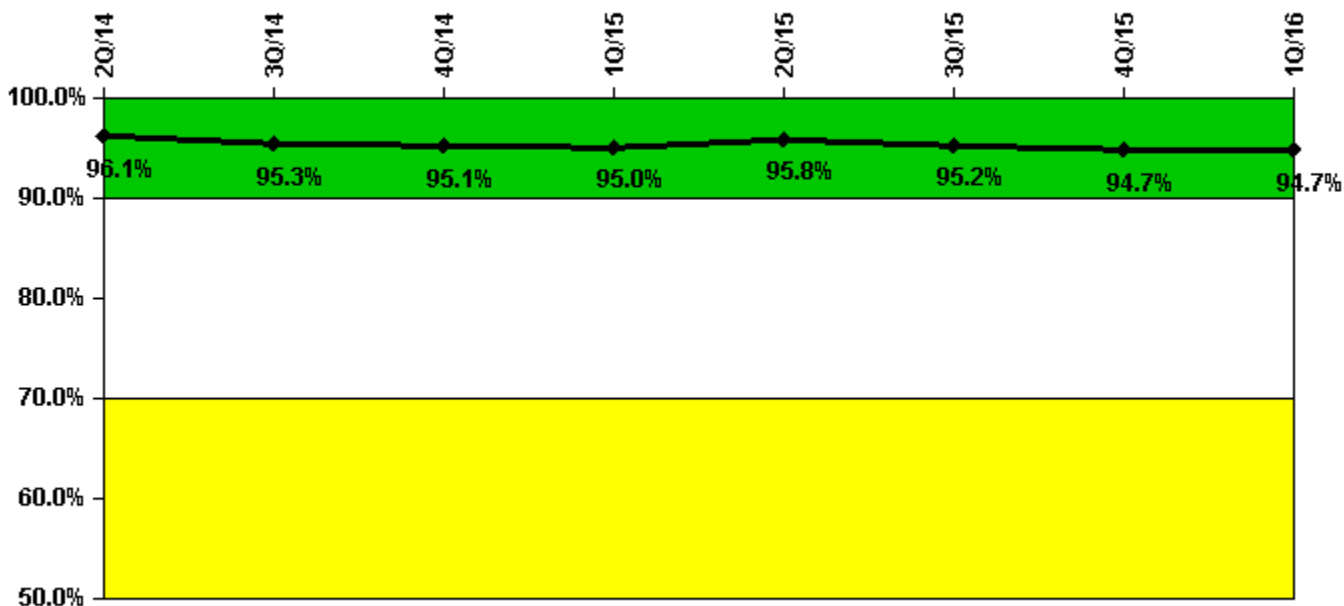
Reactor Coolant System Leakage	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum leakage	1.880	N/A	1.780	1.810	1.780	1.960	2.060	2.470	2.760	2.060	2.110	2.150
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	7.5	N/A	7.1	7.2	7.1	7.8	8.2	9.9	11.0	8.2	8.4	8.6

Reactor Coolant System Leakage	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum leakage	2.260	2.280	2.230	2.270	2.200	2.220	2.230	2.220	1.770	1.760	1.780	1.780
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	9.0	9.1	8.9	9.1	8.8	8.9	8.9	8.9	7.1	7.0	7.1	7.1

Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

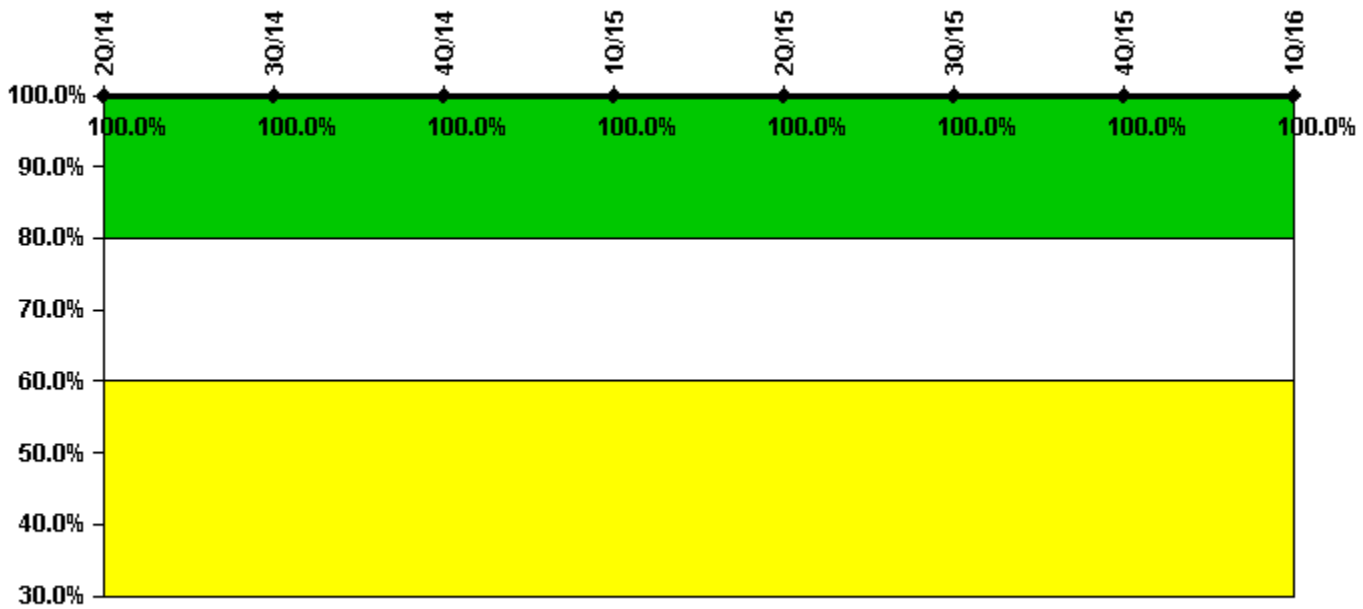
#### Notes

Drill/Exercise Performance	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Successful opportunities	25.0	36.0	20.0	29.0	40.0	49.0	32.0	18.0
Total opportunities	26.0	38.0	22.0	30.0	40.0	53.0	35.0	19.0
Indicator value	96.1%	95.3%	95.1%	95.0%	95.8%	95.2%	94.7%	94.7%

#### Licensee Comments:

3Q/14: Data for Drill / Exercise Performance was revised based on reevaluation of the data over the past two years. Specifically, data was revised for the following time periods: July 2012; April, Nov & Dec 2013; Feb, March & June 2014. The PI color was Green before the revisions and remains Green after the revisions for each of the time periods. There is no safety significance associated with these revisions.

### ERO Drill Participation



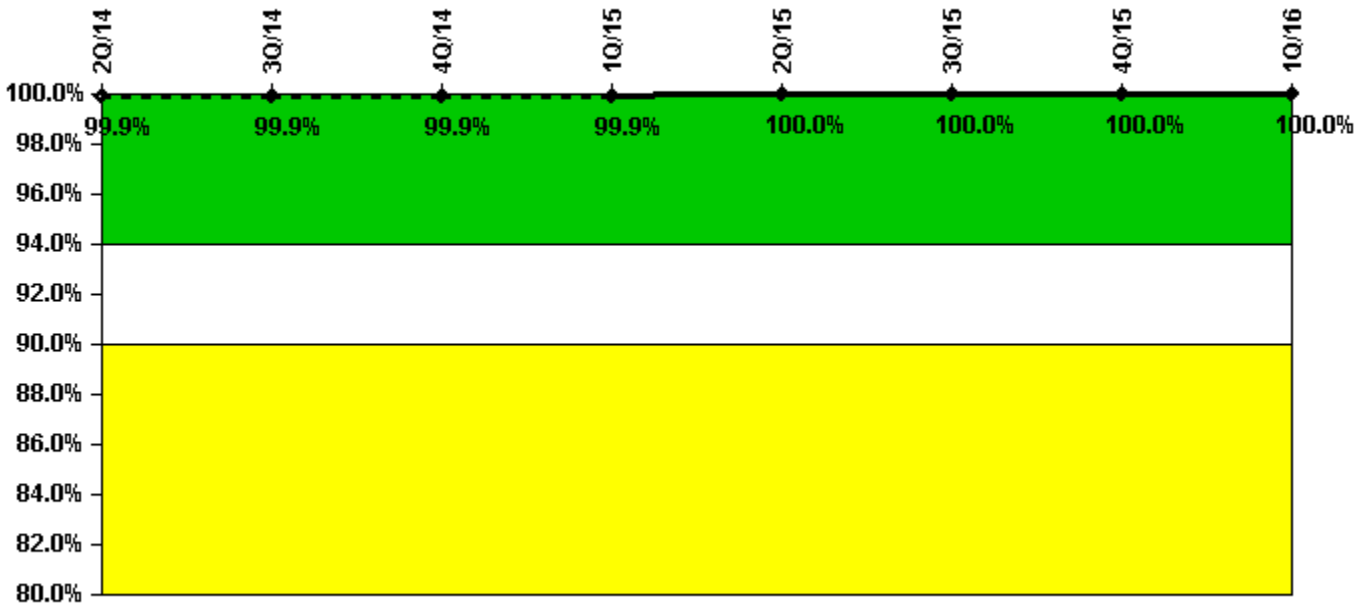
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Participating Key personnel	90.0	86.0	82.0	78.0	80.0	80.0	87.0	84.0
Total Key personnel	90.0	86.0	82.0	78.0	80.0	80.0	87.0	84.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Alert & Notification System



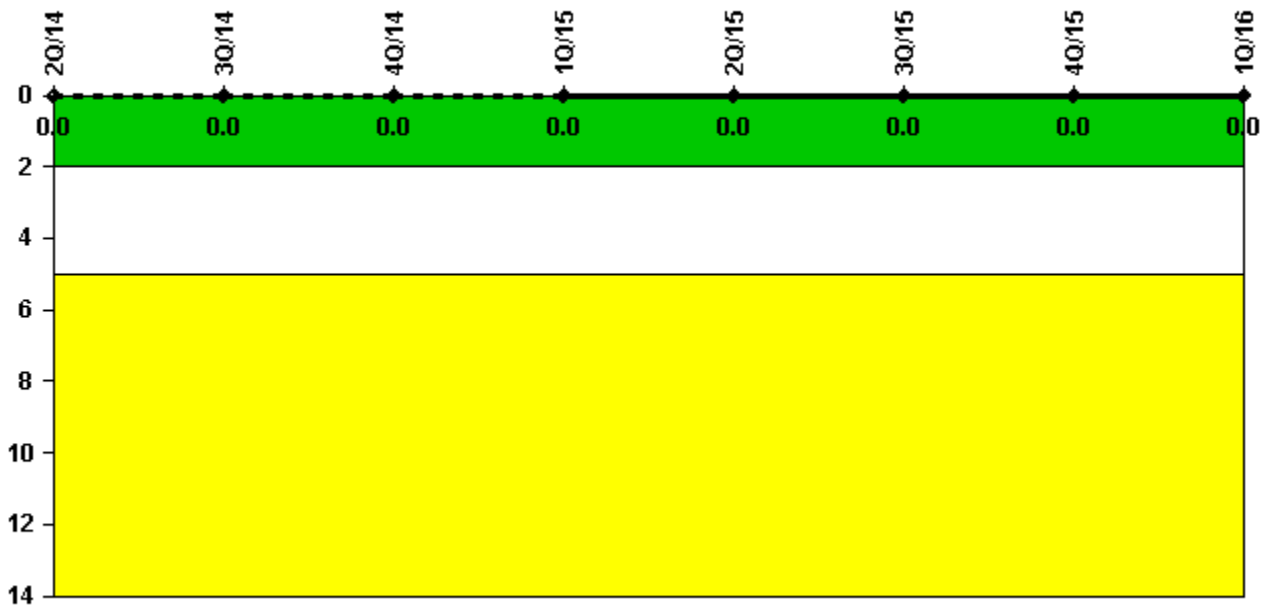
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Successful siren-tests	530	684	532	532	532	608	608	532
Total sirens-tests	532	684	532	532	532	608	608	532
Indicator value	99.9%	99.9%	99.9%	99.9%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



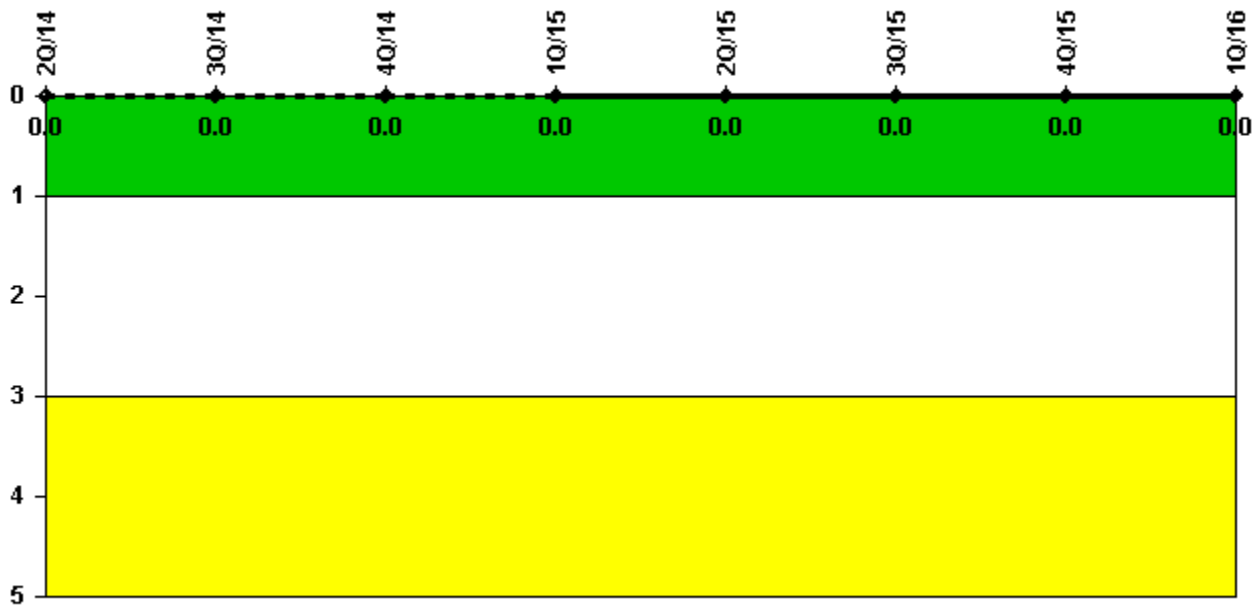
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.



▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

*Last Modified: April 23, 2016*